

EXERCISE #2	FACTORING REVIEW (Common, Simple Trinomial)
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Factor the given expressions in #1 – 8.

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| 1. | a) | $12m - 24p$ | b) | $a - ar^3y$ |
| 2. | a) | $2a^2 - 12ab + 14ac$ | b) | $6x^2 - 18x^6y - 6ax^3z$ |
| 3. | a) | $3r^2 - 15rh$ | b) | $4n^3 - 4n^2$ |
| 4. | a) | $32x^4y + 4x^3y$ | b) | $3mn + 6n^2m^2$ |
| 5. | a) | $x^2 - 7x + 12$ | b) | $x^2 - 10x - 24$ |
| 6. | a) | $x^2 + 25x + 24$ | b) | $x^2 - 4x - 12$ |
| 7. | a) | $x^2 + x - 72$ | b) | $c^2 - 4c - 12$ |
| 8. | a) | $4 - 5c + c^2$ | b) | $x^2 - x - 6$ |

9. If $x = -3$ and $y = 4$, find the value of:

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|----|----------------|----|---------------|
| a) | $2x + 3y - xy$ | b) | $x^2y + xy^2$ |
|----|----------------|----|---------------|

10. Solve the equation: $3 - 2(x + 1) = 5x + 4$

11. Solve the equation: $\frac{x}{2} + 1 = \frac{x}{3}$

12. Simplify the following expressions:

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|----|------------|----|--------------------|----|----------------------|
| a) | $(3x^4)^3$ | b) | $(4x^2y)(3x^4y^2)$ | c) | $\frac{16x^2y}{4xy}$ |
|----|------------|----|--------------------|----|----------------------|

EXERCISE #2**FACTORING REVIEW****ANSWERS****(Common, Simple Trinomial)**

1. a) $12(m-2p)$

b) $a(1-r^3y)$

2. a) $2a(a-6b+7c)$

b) $6x^2(1-3x^4y-axz)$

3. a) $3r(r-5h)$

b) $4n^2(n-1)$

4. a) $4x^3y(8x+1)$

b) $3mn(1+2mn)$

5. a) $(x-4)(x-3)$

b) $(x+2)(x-12)$

6. a) $(x+1)(x+24)$

b) $(x-6)(x+2)$

7. a) $(x+9)(x-8)$

b) $(c-6)(c+2)$

8. a) $(4-c)(1-c)$ or $(c-4)(c-1)$

b) $(x-3)(x+2)$

9. a) 18

b) -12

10. $x = -\frac{3}{7}$

11. $x = -6$

12. a) $27x^{12}$

b) $12x^6y^3$

c) $4x$